

Drawings:

The drawings stand objected to because some of the features recited in the currently pending claims are allegedly not shown clearly in Figures 38-41. Applicants are submitting herewith a Drawing Change Authorization Request and proposed New Figures 39, 40 and 41 to replace the as-filed versions.

Rejections:35 U.S.C. § 112:

Claims 8-15 (Applicants believe this should be 8-13 upon review of the Office Action Summary) are rejected under 35 U.S.C. § 112, first paragraph, as allegedly containing subject matter not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The section of the specification relating to Figures 38-41 originally stated that the AC power spade terminals were "similar to those described previously". The AC power spade terminals are described "previously" on pages 19-22, with reference to Figures 33 and 34, in sufficient detail to enable one skilled in the electrical connector art to make and/or use the embodiments recited in claims 8-13. Applicants have amended the specification to specifically reference Figures 33 and 34, and to be consistent with the proposed drawings changes illustrated in proposed new Figures 39, 40 and 41. Note that claims 8-10 and 12-13 have been amended by deleting "plug contact" and substituting therefore "terminal" so as to be consistent with the terminology used in the specification portions when describing the AC power contacts/terminals.

Claims 8-9, and 12 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. Applicants have amended claims 8 and 12 by deleting "it" and substituting therefore "the terminal(s)". Applicants submit that the amendments render claims 8-9 and 12 definite, and request confirmation of the same.

Based on the foregoing, Applicants respectfully request reconsideration and withdrawal of the section 112 rejections.

35 U.S.C. § 102:

Claims 8-12 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by

Davis (U.S. Pat. No. 5,295,843). Applicants respectfully disagree.

Claims 8-12 each recite, inter alia, a conductive terminal having a cable plug projection for mating with a corresponding contact of an AC power cable plug. The AC power terminals recited in the pending claims are not intended to contact and/or connect to a circuit board, but are instead designed to engage contacts from a mating connector with one portion thereof and engage an AC power cable plug with another portion thereof. Accordingly, independent claims 8 and 10 have been amended to recite the conductive terminal is "devoid of any circuit board engaging features". This particular configuration of a conductive terminal is clearly shown in Figures 39-41 of the instant application. In contrast, Davis teaches power contacts having terminations 22 for connection to a circuit board. See, for example, Figure 3 and the column 3, lines 30-35. Thus, claims 8-12 are patentably distinct from Davis et al.

Based on the foregoing, Applicants respectfully request withdrawal of the section 102 rejection.

35 U.S.C. § 103:

Claim 13 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentably over Demler, Jr. et al. (U.S. Pat. No. 4,881,905) in view of Davis et al. ('343). Applicants respectfully disagree.

Claim 13 originally recited, inter alia, "a cover enclosing said insulative housing, said cover having a groove around the perimeter thereof; and a mounting bracket having portions inserted into said groove such that said insulative housing can *float* within said mounting bracket". The examiner did not address the "floating" aspect of the electrical connection system. In fact, neither Demler nor Davis teaches this feature. Applicants have amended claim 13 by adding "loosely fitted within" to further describe/emphasize the connective nature between the mounting bracket and cover groove.

Based on the foregoing, Applicants respectfully request reconsideration and withdrawal of the section 103 rejection.

New Claims:

New claims 21 and 22 are similar to original claims 8 and 10, but recite the opposed cantilever beams, associated with a cable plug projection, include portions that are in contact


with each other.

Conclusion:

The foregoing represents a complete response to the Office Action, and Applicant submits that the claims in their present form are in condition for allowance. Early and favorable consideration is earnestly solicited.

Attached hereto is a marked-up version of the changes made to the application by the current amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

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Andrew J. Hagerty
Registration No. 44,141

Woodcock Washburn LLP
One Liberty Place - 46th Floor
Philadelphia PA 19103
Telephone: (215) 568-3100
Facsimile: (215) 568-3439

VERSION WITH MARKINGS TO SHOW CHANGES MADE**In the specification:**

The paragraph spanning pages 23 and 24 has been amended as follows:

Another configuration of a power connector incorporating connections for an external AC power supply is shown in Figures 38-41. In this embodiment, the connector housing is designed for AC power spade terminals only. In this example, six AC power spade terminals 470, similar to those described previously with reference to and as shown in Figures 33 and 34, are disposed in connector housing 472. Again, the connectors are not intended to be limited to a design for six cable wires and the connector housing can be designed to accommodate any desired number of AC power spade terminals. The top face 473 of the connector housing exposes the opposing side walls of the receptacle end of the AC power spade terminals for mating with an appropriate header or plug connection. The AC power spade terminals are engaged in the connector housing by a friction fit as described previously and are retained in the housing by engagement with a locking bar 474 in the same manner described above. In this embodiment, the locking bar 474 is a separate piece. The connector housing is disposed within opposing halves 476 and 478 of a clamshell cable casing, which cable casing is of the type known in the art. In a preferred embodiment the cable casing is modified to include a groove 480 extending around the perimeter of the casing. A mounting bracket 482, which is affixed to some component structure by the use of screws or the like through holes 484, is designed such that opposing wings 486 and 488 and rail 490 fit into the groove 480. Power connectors of the type described herein float or move with respect to each other when they are mated together due to the design of the post projections 492 and the corresponding post-receiving holes in the mating connector. In order to accommodate the floatable characteristics of the mated power connectors described herein, the mounting bracket is dimensioned such that the wings 486 and 488 and the rail 490 fit loosely within the groove 480. As such, the connector housing 472 can float from side-to-side and forward-to-backward while being otherwise maintained in place by the mounting bracket 482. One of the wings of the mounting bracket can have a cut-out 494 that loosely engages a tab on the connector housing as a polarization feature to ensure proper orientation of the mounting bracket onto the cable casing. Otherwise, the loose fitting nature of the mounting bracket

into the groove of the cable casing provides for blind mating of cable connector into the mounting bracket. This is beneficial due to the crowding of various connections in the system, which connections may be at a remote location that is difficult to access for a user.

In the claims:

Claim 11 has been canceled.

Claims 8-10 and 12-13 have been amended as follows:

8. (Amended) A conductive [plug contact] terminal having a cable plug projection for mating with a corresponding contact of an AC power cable plug wherein the cable plug projection comprises a pair of opposed [and spaced apart] cantilever beams and wherein each of said cantilever beams has an arc to impart a spring-like effect of said cable plug projection when [it] the terminal is mated with a corresponding contact of an AC power cable plug; wherein the conductive terminal is devoid of any circuit board engaging features.

9. (Amended) The conductive [plug contact] terminal of claim 8, further having a pair of spaced apart walls, each of which including one of said cantilever beams extending therefrom, said spaced apart walls forming a [plug] contact receiving space therebetween.

10. (Amended) A receptacle electrical connector comprising an insulative housing having a plurality of conductive [plug contacts] terminals, each said [plug contact] terminal having a cable plug projection for mating with a corresponding contact of an AC power cable plug and further having a pair of spaced walls forming a [plug contact] receiving space therebetween for accepting a contact of a complimentary electrical connector, wherein said cable plug projection comprises a pair of opposed cantilever beams, and each said terminal is devoid of any circuit board engaging features.

12. (Amended) The connector of claim 10, wherein each of the cantilever beams has an arc to impart a spring-like effect of said cable plug projection when [it] the terminals [is] are mated with a corresponding contact of an AC power cable plug.

13. (Amended) An electrical connection system comprising:

9 m 10 a receptacle electrical connector comprising an insulative housing having a plurality of conductive [plug contacts] terminals, each said [plug contact] terminal having a cable plug projection for mating with a corresponding contact of an (AC power cable plug) and further having a pair of spaced walls forming a [plug contact] receiving space therebetween for accepting a contact of a complimentary electrical connector;

a cover enclosing said insulative housing, said cover having a groove around the perimeter thereof; and

a mounting bracket having portions thereof [inserted into] loosely fitted within said groove such that said insulative housing can float within said mounting bracket.

The following new claims have been added:

21. (New) A conductive terminal having a cable plug projection for mating with a corresponding contact of an (AC power cable plug) wherein the cable plug projection comprises a pair of opposed cantilever beams in contact with each other along portions thereof, and wherein each of said cantilever beams has an arc such that a space exists between the opposed cantilever beams at a location proximate the arcs, the arcs impart a spring-like effect of said cable plug projection when the terminal is mated with a corresponding contact of an AC power cable plug.

22. (New) A receptacle electrical connector comprising an insulative housing having a plurality of conductive terminals, each said terminal having a cable plug projection for mating with a corresponding contact of (an AC power cable plug) and further having a pair of spaced walls forming a receiving space therebetween for accepting a contact of a complimentary electrical connector, wherein said cable plug projection comprises a pair of opposed cantilever beams in contact with each other along portions thereof ?